

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for forming a tissue product comprising:
providing a liquid furnish of cellulosic fibers;
forming a multi-layered wet web from said liquid furnish of cellulosic fibers;
applying a debonder to said furnish, said wet web, or combinations thereof,
wherein said debonder includes an imidazoline quaternary compound or an ester-functional quaternary ammonium compound;

after applying said debonder, applying at least one latex having a glass transition temperature less than about 30°C to said liquid furnish, said wet web, or combinations thereof, said latex being applied in an amount less than about 60 pounds per ton of the dry weight of said cellulosic fibers; and

drying said wet web, wherein greater than about 60% of said latex is retained on said cellulosic fibers, wherein at least one outer layer of said dried web contains said latex-treated cellulosic fibers, and wherein the tissue product exhibits a level of slough that is less than the level of slough exhibited by an otherwise identical tissue product formed without applying said at least one latex to the liquid furnish, the wet web, or combinations thereof.

2. (Original) A method as defined in claim 1, wherein the glass transition temperature of said latex is greater than about -25°C.

3. (Original) A method as defined in claim 1, wherein the glass transition temperature of said latex is between about -15°C to about 15°C.

4. (Original) A method as defined in claim 1, wherein the glass transition temperature of said latex is between about -10°C to about 0°C.

5. (Original) A method as defined in claim 1, wherein said latex is selected from the group consisting of styrene-butadiene copolymers, polyvinyl acetate homopolymers, vinyl-acetate ethylene copolymers, vinyl-acetate acrylic copolymers, ethylene-vinyl chloride copolymers, ethylene-vinyl chloride-vinyl acetate terpolymers, acrylic polyvinyl chloride polymers, acrylic polymers, and nitrile polymers.

6. (Original) A method as defined in claim 1, wherein said latex is applied in an amount of between about 1 to about 40 pounds per ton of the dry weight of said cellulosic fibers.

7. (Original) A method as defined in claim 1, wherein said latex is applied in an amount of between about 1 to about 20 pounds per ton of the dry weight of said cellulosic fibers.

8. Canceled

9. (Original) A method as defined in claim 1, further comprising applying a wet strength agent to said furnish, said wet web, or combinations thereof;

10. (Original) A method as defined in claim 9, wherein said wet strength agent is applied prior to said latex.

11. (Original) A method as defined in claim 9, wherein said wet strength agent includes a temporary wet strength agent.

12. (Original) A method as defined in claim 11, wherein said temporary wet strength agent comprises a cationic polyacrylamide polymer.

13. (Original) A method as defined in claim 11, wherein said temporary wet strength agent is applied in an amount between about 1 to about 60 pounds per ton of the dry weight of said cellulosic fibers.

14. (Original) A method as defined in claim 9, wherein said wet strength agent includes a permanent wet strength agent.

15. (Original) A method as defined in claim 14, wherein said permanent wet strength agent comprises a cationic polyamide polymer.

16. (Original) A method as defined in claim 14, wherein said permanent wet strength agent is applied in an amount between about 1 to about 20 pounds per ton of the dry weight of said cellulosic fibers.

17-18. Cancelled

19. (Original) A method as defined in claim 1, wherein said debonder is applied in an amount between about 1 to about 30 pounds per ton of the dry weight of said cellulosic fibers.

20. (Cancelled)

21. (Original) A method as defined in claim 1, wherein between about 75% to about 90% of said latex is retained on said cellulosic fibers.

22. (Original) A method as defined in claim 1, wherein said latex is sprayed onto said wet web.

23. (Currently Amended) A method for forming a tissue product comprising:
providing a liquid furnish of cellulosic fibers;
forming a multi-layered wet web from said liquid furnish of cellulosic fibers;
applying a debonder to said furnish, said wet web, or combinations thereof, in an amount between about 1 to about 30 pounds per ton of said cellulosic fibers, wherein said debonder includes an imidazoline quaternary compound or an ester-functional quaternary ammonium compound;

applying a wet strength agent to said furnish, said wet web, or combinations thereof, said wet strength agent being selected from the group consisting of temporary wet strength agents, permanent wet strength agents, and combinations thereof;

after applying said debonder, applying at least one latex to said furnish, said wet web, or combinations thereof in an amount between about 1 to about 40 pounds per ton of the dry weight of said cellulosic fibers, said latex having a glass transition temperature less than about 30°C and greater than about -25°C; and

drying said wet web, wherein greater than about 60% of said latex is retained on said cellulosic fibers, wherein at least one outer layer of said dried web contains said latex-treated cellulosic fibers, and wherein the tissue product exhibits a level of slough that is less than the level of slough exhibited by an otherwise identical tissue product formed without applying said at least one latex to the furnish, the wet web, or combinations thereof.

24. (Original) A method as defined in claim 23, wherein the glass transition temperature of said latex is between about -15°C to about 15°C.

25. (Original) A method as defined in claim 23, wherein the glass transition temperature of said latex is between about -10°C to about 0°C.

26. (Original) A method as defined in claim 23, wherein said latex is selected from the group consisting of styrene-butadiene copolymers, polyvinyl acetate

homopolymers, vinyl-acetate ethylene copolymers, vinyl-acetate acrylic copolymers, ethylene-vinyl chloride copolymers, ethylene-vinyl chloride-vinyl acetate terpolymers, acrylic polyvinyl chloride polymers, acrylic polymers, and nitrile polymers.

27-29. Canceled

30. (Original) A method as defined in claim 23, wherein between about 75% to about 90% of said latex is retained on said cellulosic fibers.

31. (Original) A method as defined in claim 23, wherein said latex is sprayed onto said wet web.

32. (Original) A method as defined in claim 23, wherein said latex is applied in an amount between about 1 to about 40 pounds per ton of the dry weight of said cellulosic fibers.

33-47. Canceled

48. (New) A method for forming a tissue product comprising:

providing a liquid furnish of cellulosic fibers;

applying a debonder to said furnish, wherein said debonder includes an imidazoline quaternary compound or an ester-functional quaternary ammonium compound;

forming a multi-layered wet web from said liquid furnish of cellulosic fibers;

spraying at least one latex having a glass transition temperature less than about 30°C onto said wet web, said latex being applied in an amount less than about 60 pounds per ton of the dry weight of said cellulosic fibers; and

drying said wet web, wherein greater than about 60% of said latex is retained on said cellulosic fibers, wherein at least one outer layer of said dried web contains said latex-treated cellulosic fibers, and wherein the tissue product exhibits a level of slough that is less than the level of slough exhibited by an otherwise identical tissue product formed without applying said at least one latex to the liquid furnish, the wet web, or combinations thereof.

49. (New) A method as defined in claim 48, wherein the glass transition temperature of said latex is greater than about -25°C.

50. (New) A method as defined in claim 48, wherein the glass transition

temperature of said latex is between about -15°C to about 15°C.

51. (New) A method as defined in claim 48, wherein the glass transition temperature of said latex is between about -10°C to about 0°C.

52. (New) A method as defined in claim 48, wherein said latex is selected from the group consisting of styrene-butadiene copolymers, polyvinyl acetate homopolymers, vinyl-acetate ethylene copolymers, vinyl-acetate acrylic copolymers, ethylene-vinyl chloride copolymers, ethylene-vinyl chloride-vinyl acetate terpolymers, acrylic polyvinyl chloride polymers, acrylic polymers, and nitrile polymers.

53. (New) A method as defined in claim 48, wherein said latex is sprayed in an amount of between about 1 to about 40 pounds per ton of the dry weight of said cellulosic fibers.

54. (New) A method as defined in claim 48, wherein said latex is applied in an amount of between about 1 to about 20 pounds per ton of the dry weight of said cellulosic fibers.

55. (New) A method as defined in claim 48, further comprising applying a wet strength agent to said furnish, said wet web, or combinations thereof;

56. (New) A method as defined in claim 55, wherein said wet strength agent is applied prior to said latex.

57. (New) A method as defined in claim 55, wherein said wet strength agent includes a temporary wet strength agent.

58. (New) A method as defined in claim 57, wherein said temporary wet strength agent comprises a cationic polyacrylamide polymer.

59. (New) A method as defined in claim 57, wherein said temporary wet strength agent is applied in an amount between about 1 to about 60 pounds per ton of the dry weight of said cellulosic fibers.

60. (New) A method as defined in claim 57, wherein said wet strength agent includes a permanent wet strength agent.

61. (New) A method as defined in claim 60, wherein said permanent wet strength agent comprises a cationic polyamide polymer.

62. (New) A method as defined in claim 60, wherein said permanent wet strength agent is applied in an amount between about 1 to about 20 pounds per ton of the dry weight of said cellulosic fibers.